DACW05-02-B-0006

AMENDMENT OF SOLICITA	ATION/MODIETA	CATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES
AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		J	1 40		
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.		5. PROJEC	T NO.(If applicable)
0004	06-Dec-2002	W62N6M21497823/214978717			
6. ISSUED BY CODE	DACW05	7. ADMINISTERED BY (If other than item 6)		CODE	
DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, SACRAMENTO 1325 J STREET SACRAMENTO CA 95814-2922		See Item 6			
8. NAME AND ADDRESS OF CONTRACTOR	(No., Street, County,	State and Zip Code)	х ⁹	OA. AMENDMENT OF S DACW05-02-B-0006	SOLICITATION NO.
			x 9	PB. DATED (SEE ITEM 01-Nov-2002	
			1	0A. MOD. OF CONTRA	ACT/ORDER NO.
			1	0B. DATED (SEE ITE	M 13)
CODE	FACILITY COL				
		PPLIES TO AMENDMENTS OF SOLIC			
X The above numbered solicitation is amended as set forth		_		s extended, X is not ex	tended.
Offer must acknowledge receipt of this amendment pri (a) By completing Items 8 and 15, and returning 1 or (c) By separate letter or telegram which includes a r RECEIVED AT THE PLACE DESIGNATED FOR TH REJECTION OF YOUR OFFER. If by virtue of this an provided each telegram or letter makes reference to the	copies of the amendme eference to the solicitatio IE RECEIPT OF OFFER: nendment you desire to ch	nt; (b) By acknowledging receipt of this amendmen n and amendment numbers. FAILURE OF YOU S PRIOR TO THE HOUR AND DATE SPECIFII ange an offer already submitted, such change may	ent on R AC ED M / be m	n each copy of the offer submit KNOWLEDGMENT TO BE AY RESULT IN nade by telegram or letter,	ted;
12. ACCOUNTING AND APPROPRIATION DA	ATA (If required)				
) MODIFICATIONS OF CONTRACTS/ T/ORDER NO. AS DESCRIBED IN ITE			
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.					
B. THE ABOVE NUMBERED CONTRACT/O office, appropriation date, etc.) SET FOR					ges in paying
C. THIS SUPPLEMENTAL AGREEMENT IS	S ENTERED INTO P	URSUANT TO AUTHORITY OF:			
D. OTHER (Specify type of modification and	authority)				
E. IMPORTANT: Contractor is not,	is required to sig	en this document and return	copi	es to the issuing office.	
14. DESCRIPTION OF AMENDMENT/MODIFI where feasible.) IDIQ Drilling Services, Sacramento District Mili				-	tter
The purpose of this amendment is to incorpor Clause SPK 17-4007 incorporate additional v DFARS Clause 216.505-70 "Orders for Servi	erbage, Section H C	lause 52.216-19 & SPK 16-4002 correct	ct do	ollar values, add to Secti	
As a result of this amendment the Bid due date	As a result of this amendment the Bid due date of 12 December 2002, 13:00 Hrs (1:00 PM) PST remains unchanged.				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect. 15A. NAME AND TITLE OF SIGNER (Type or print) 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			pe or print)		
1371. HAME AND TITLE OF SIGNER (Type of	. p.m.t)	TEL:		EMAIL:	pe or print)
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNE				6C. DATE SIGNED
		BY			06-Dec-2002
(Signature of person authorized to sign)		(Signature of Contracting Off	ficer		EODIA 20 CD 10 CD
EXCEPTION TO SF 30	3	0-105-04		STANDARD	FORM 30 (Rev. 10-83)

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SECTION B - SUPPLIES OR SERVICES AND PRICES

The following have been changed as a result of this amendment:

SCHEDULE B

Section B-Supplies or Services and Prices BASE YEAR 01 January 2003-30 September 2003

Item

No.	Supplies/Services	Unit Price
0001	Contractor shall provide all labor, tools, parts, materials, supplies, equipment, su and transportation necessary to provide Drill Rig Mobilization and Demobilization ONLY	pervision
0001AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$
0001AB	51 – 200 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$
0001AC	201 – 1000 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$
0001AD	1001 – 1500 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$
0002	Daily Drill Rig Crew Subsistence This will ONLY apply to sites in Excess of 50 miles from Sacramento District Office (1325 J Street) to Work Site (Per Day)	\$
*0003	Drill Rig Drilling HOURS - Hollow Stem Auger or Mug Rotary Drilling Method to include sampling (Per Hour)	\$
0004	Drill Rig Standby Time HOURS - Hollow Stem Auger or Mug Rotary Drilling Method to include sampling	\$

(Per Hour)

0005	Drill Rig Drilling HOURS - Air Rotary/ODEX Drilling Method to include sampling (Per Hour)	\$
0006	Drill Rig Standby Time HOURS - Air Rotary/ODEX Drilling Method to include sampling (Per Hour)	\$
0007	Drill Rig Drilling HOURS - Down hole casing advance or other Percussion Drilling Systems (ARCH) Air Rotary Casing Hammer (Per Hour)	\$
0008	Drill Rig Drilling Standby Time HOURS - Down hole casing advance or other Percussion Drilling Systems (Per Hour)	\$
0009	Diamond Core Drilling LF - Drilling Method to include Sampling (Per Linear Foot)	\$
0010	Diamond Core Drilling Standby Time HOURS - Drilling Method to include sampling (Per Hour)	\$
0011	Shelby Tubes (Per Tube)	\$
0012	Shipping Boxes for Shelby Tubes (Per Box)	\$
0013	Shipping Boxes for Rock Core Samples (Per Box)	\$
0014	Grouting (Per Linear Foot)	\$
0015	Automatic Hammer Energy Testing of Automatic Hammer HOURS – to be conducted at the Beginning, Middle and End of Selected Project (Per Ho	\$ our)
0016	Contractor shall Delivery and Removal of all pertinent equipment for Color Video taping of Boreholes or for Drain Cleaning at Rehabilitation or for Relief Well Rehabilitation - Mobilization and De mobilization ONLY	nd
0016AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site (Per occurrence)	\$

0016AB District Office (1	51 – 200 Miles from Sacramento 325 J Street) to Work Site(Per occurrence)	\$	
0016AC District	201 – 1000 Miles from Sacramento 1 Office (1325 J Street) to Work Site(Per occurrence)	\$	
0016AD	1001 – 1500 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$	
0017	Daily Crew Subsistence for Projects involving down hole Video Camera, Drain Cleaning (Rehabilitation) or Relief Well Cleaning (Rehabilitation) - This will ONLY apply to sites in Excess of 50 miles from Contractor's Main Office to Work Site (Per Day)	\$	
0018	Video Tape Display/Recording for Down hole Video Camera with audio track to view sidewalls of boreholes, drains, or relief wells (Per Drain)		
0018AA	0 – 50 Depth of Drain (Per Drain)	\$	
0018AB	51 – 100 Depth of Drain (Per Drain)	\$	
0018AC	101 – 200 Depth of Drain (Per Drain)	\$	
0019	Relief Well Rehabilitation, Cleaning less than 50 feet deep (Per occurrence)	\$	
0020	Relief Well Rehabilitation, Cleaning Greater than 50 feet deep (Per occurrence)	\$	
0021	Permits for encroachment to access property sites, Public Property (roads, etc.) (Cost to be Negotiated on each Task Order IAW Paragraph 4.7 of the SOW)	ТВС) TBD
0022	Cold Patch Asphalt (Per Bag)	\$	

0023	Firefighting Unit HOURS - (Per Hour)	\$
0024 (Per He	Traffic Control/Flagger Crew	\$
0025	Permability Test Hours (Per Hour)	\$
0026	Water Quality Test of Wells (Per Hour)	\$
0027	Piezometers Installation (Per Linear Foot)	\$
0028	Percolation Tests (Per Test)	\$
0029	Instrumentation Rehabilitation on piezometers, inclinometers and other instrumentations (Per Hour)	\$
0030	Inclinometers Installation (Per Linear Foot)	\$
0031	Grouting for piezometers, monitoring wells, or inclinometers (Per Linear Foot)	\$
0032	Pump Test of wells, any type (Per Hour)	\$
0033	Water (Hydraulic) Pressure (Packer) Tests – To be used for Rock Coring (Per HOUR)	\$
0034	Cone Penetrometer Test (CPT) Rig Mobilization/Demobilization	
0034AA 0 – 50 N	Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
0034AB	51 – 200 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
0034AC	201 – 1000 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
0034AD	1001 – 1500 Miles from Sacramento	\$

	District Office (1325 J Street) to Work Site(Per occurrence)	
0035	Daily Cone Penetrometer Rig Crew Subsistence - This will ONLY apply to sites in excess of 50 miles from Sacramento District Office (1325 J Street) to Work Site (Per Day)	\$
0036	Grouted Cone Penetrometer Test (CPT) (Per Linear Foot)	\$
0037	Cone Penetrometer Test (CPT) Standby Time HOURS (Per Hour)	\$
0038	Pore Pressure Dissipation Test HOURS for CPT (Per Hour)	\$
0039	Backhoe/Trenching Excavation Mobilization and Demobilization ONLY	
0039AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
0039AB	51 – 200 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
0039AC	201 – 1000 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
0039AD Office (1325 J S	1001 – 1500 Miles from Sacramento treet) to Work Site(Per occurrence)	\$ District
0040	Daily Backhoe/Trenching Excavation Crew Subsistence - This will ONLY apply to sites in Excess of 50 miles from Sacramento District Office (1325 J Street) to Work Site (Per Day)	\$
0041	Backhoe/Trenching Excavation HOURS (Per Hour)	\$
0042	Backhoe/Trenching Excavation Standby Time HOURS (Per Hour)	\$

0043	Geologist/Geotechnical Engineer	\$
	HOURS (Per Hour)	

0044	Additional driller's helper for Drill Rig (Per Hour)	\$
0045	Additional helper for Backhoe Operator (Per Hour)	\$
0046	Additional helper for Boreholes, Drains, or Relief Well Rehabilitation Operator (Per Hour)	\$

BASEYEAR TOTAL ESTIMATED CAPACITY PRICE \$1,333,333.33

*NOTE: Payment will be made only for those hours that the drill rig is actually used during drilling. Drilling hours will not be paid for drilling rig use during the grouting phase and grouting shall be bid accordingly.

Section B-Supplies or Services and Prices 1st OPTION YEAR 01 October 2003-30 September 2004

Item

Item		
No.	Supplies/Services	Unit Price
1001	Contractor shall provide all labor, tools, parts, materials, supplies, equipment, su and transportation necessary to provide Drill Rig Mobilization and Demobilization ONLY	pervision
1001AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$
1001AB	51 – 200 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$
1001AC	201 – 1000 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$
1001AD	1001 – 1500 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$
1002	Daily Drill Rig Crew Subsistence This will ONLY apply to sites in Excess of 50 miles from Sacramento District Office (1325 J Street) to Work Site (Per Day)	\$
*1003	Drill Rig Drilling HOURS - Hollow Stem Auger or Mug Rotary Drilling Method to include sampling (Per Hour)	\$
1004	Drill Rig Standby Time HOURS - Hollow Stem Auger or Mug Rotary Drilling Method to include sampling (Per Hour)	\$
1005	Drill Rig Drilling HOURS - Air Rotary/ODEX Drilling Method to include sampling (Per Hour)	\$
1006	Drill Rig Standby Time HOURS - Air Rotary/ODEX Drilling Method	\$

	to include sampling (Per Hour)	
1007	Drill Rig Drilling HOURS - Down hole casing advance or other Percussion Drilling Systems (ARCH) Air Rotary Casing Hammer (Per Hour)	\$
1008	Drill Rig Drilling Standby Time HOURS - Down hole casing advance or other Percussion Drilling Systems (Per Hour)	\$
1009	Diamond Core Drilling LF - Drilling Method to include Sampling (Per Linear Foot)	\$
1010	Diamond Core Drilling Standby Time HOURS - Drilling Method to include sampling (Per Hour)	\$
1011	Shelby Tubes (Per Tube)	\$
1012	Shipping Boxes for Shelby Tubes (Per Box)	\$
1013	Shipping Boxes for Rock Core Samples (Per Box)	\$
1014	Grouting (Per Linear Foot)	\$
1015	Automatic Hammer Energy Testing of Automatic Hammer HOURS – to be conducted at the Beginning, Middle and End of Selected Project (Per Ho	\$ our)
1016	Contractor shall Delivery and Removal of all pertinent equipment for Color Video taping of Boreholes or for Drain Cleaning at Rehabilitation or for Relief Well Rehabilitation - Mobilization and Demobilization ONLY	nd
1016AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site (Per occurrence)	\$
1016AB District Office (1	51 – 200 Miles from Sacramento 325 J Street) to Work Site(Per occurrence)	\$
1016AC District	201 – 1000 Miles from Sacramento 1 Office (1325 J Street) to Work Site(Per occurrence)	\$

1016AD	1001 – 1500 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$	
1017	Daily Crew Subsistence for Projects involving down hole Video Camera, Drain Cleaning (Rehabilitation) or Relief Well Cleaning (Rehabilitation) - This will ONLY apply to sites in Excess of 50 miles from Contractor's Main Office to Work Site (Per Day)	\$	
1018	Video Tape Display/Recording for Down hole Video Camera with audio track to view sidewalls of boreholes, drains, or relief wells (Per Drain)		
1018AA	0 – 50 Depth of Drain (Per Drain)	\$	
1018AB	51 – 100 Depth of Drain (Per Drain)	\$	
1018AC	101 – 200 Depth of Drain (Per Drain)	\$	
1019	Relief Well Rehabilitation, Cleaning less than 50 feet deep (Per occurrence)	\$	
1020	Relief Well Rehabilitation, Cleaning Greater than 50 feet deep (Per occurrence)	\$	
1021	Permits for encroachment to access property sites, Public Property (roads, etc.) (Cost to be Negotiated on each Task Order IAW Paragraph 4.7 of the SOW)	TBD TB	D
1022	Cold Patch Asphalt (Per Bag)	\$	
1023	Firefighting Unit HOURS - (Per Hour)	\$	
1024 (Per He	Traffic Control/Flagger Crew	\$	
1025	Permability Test Hours (Per Hour)	\$	

1026	Water Quality Test of Wells (Per Hour)	\$
1027	Piezometers Installation (Per Linear Foot)	\$
1028	Percolation Tests (Per Test)	\$
1029	Instrumentation Rehabilitation on piezometers, inclinometers and other instrumentations (Per Hour)	\$
1030	Inclinometers Installation (Per Linear Foot)	\$
1031	Grouting for piezometers, monitoring wells, or inclinometers (Per Linear Foot)	\$
1032	Pump Test of wells, any type (Per Hour)	\$
1033	Water (Hydraulic) Pressure (Packer) Tests – To be used for Rock Coring (Per HOUR)	\$
1034	Cone Penetrometer Test (CPT) Rig Mobilization/Demobilization	
1034AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
1034AB	51 – 200 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
1034AC	201 – 1000 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
1034AD	1001 – 1500 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
1035	Daily Cone Penetrometer Rig Crew Subsistence - This will ONLY apply to sites in excess of 50 miles from Sacramento District Office (1325 J Street) to Work Site (Per Day)	\$

1036	Grouted Cone Penetrometer Test (CPT) (Per Linear Foot)	\$
1037	Cone Penetrometer Test (CPT) Standby Time HOURS (Per Hour)	\$
1038	Pore Pressure Dissipation Test HOURS for CPT (Per Hour)	\$
1039	Backhoe/Trenching Excavation Mobilization and Demobilization ONLY	
1039AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
1039AB	51 – 200 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
1039AC	201 – 1000 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
1039AD Office	1001 – 1500 Miles from Sacramento (1325 J Street) to Work Site(Per occurrence)	\$ District
1040	Daily Backhoe/Trenching Excavation Crew Subsistence - This will ONLY apply to sites in Excess of 50 miles from Sacramento District Office (1325 J Street) to Work Site (Per Day)	\$
1041	Backhoe/Trenching Excavation HOURS (Per Hour)	\$
1042	Backhoe/Trenching Excavation Standby Time HOURS (Per Hour)	\$
1043	Geologist/Geotechnical Engineer HOURS (Per Hour)	\$

1044	Additional driller's helper for Drill Rig (Per Hour)	\$
1045	Additional helper for Backhoe Operator (Per Hour)	\$
1046	Additional helper for Boreholes, Drains, or Relief Well Rehabilitation Operator (Per Hour)	\$

1ST OPTION YEAR TOTAL ESTIMATED CAPACITY PRICE \$1,333,333.33

*NOTE: Payment will be made only for those hours that the drill rig is actually used during drilling. Drilling hours will not be paid for drilling rig use during the grouting phase and grouting shall be bid accordingly.

Section B-Supplies or Services and Prices 2nd OPTION YEAR 01 October 2004-30 September 2005

Item

No. Supplies/Services		<u>Unit Price</u>	
2001	Contractor shall provide all labor, tools, parts, materials, supplies, equipment, supervision and transportation necessary to provide Drill Rig Mobilization and Demobilization ONLY		
2001AA	0 – 50 Miles from SacramentoDistrict Office (1325 J Street) toWork Site (Per Occurrence)	\$	
2001AB	51 – 200 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$	
2001AC	201 – 1000 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$	
2001AD	1001 – 1500 Miles from Sacramento District Office (1325 J Street) to Work Site (Per Occurrence)	\$	
2002	Daily Drill Rig Crew Subsistence This will ONLY apply to sites in Excess of 50 miles from Sacramento District Office (1325 J Street) to Work Site (Per Day)	\$	
*2003	Drill Rig Drilling HOURS - Hollow Stem Auger or Mug Rotary Drilling Method to include sampling (Per Hour)	\$	
2004	Drill Rig Standby Time HOURS - Hollow Stem Auger or Mug Rotary Drilling Method to include sampling (Per Hour)	\$	
2005	Drill Rig Drilling HOURS - Air Rotary/ODEX Drilling Method to include sampling (Per Hour)	\$	

2006	Drill Rig Standby Time HOURS - Air Rotary/ODEX Drilling Method to include sampling (Per Hour)	\$
2007	Drill Rig Drilling HOURS - Down hole casing advance or other Percussion Drilling Systems (ARCH) Air Rotary Casing Hammer (Per Hour)	\$
2008	Drill Rig Drilling Standby Time HOURS - Down hole casing advance or other Percussion Drilling Systems (Per Hour)	\$
2009	Diamond Core Drilling LF - Drilling Method to include Sampling (Per Linear Foot)	\$
2010	Diamond Core Drilling Standby Time HOURS - Drilling Method to include sampling (Per Hour)	\$
2011	Shelby Tubes (Per Tube)	\$
2012	Shipping Boxes for Shelby Tubes (Per Box)	\$
2013	Shipping Boxes for Rock Core Samples (Per Box)	\$
2014	Grouting (Per Linear Foot)	\$
2015	Automatic Hammer Energy Testing of Automatic Hammer HOURS – to be conducted at the Beginning, Middle and End of Selected Project (Per Ho	\$ our)
2016	Contractor shall Delivery and Removal of all pertinent equipment for Color Video taping of Boreholes or for Drain Cleaning at Rehabilitation or for Relief Well Rehabilitation - Mobilization and Demobilization ONLY	nd
2016AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site (Per occurrence)	\$
2016AB District Office (1	51 – 200 Miles from Sacramento 325 J Street) to Work Site(Per occurrence)	\$
2016AC District	201 – 1000 Miles from Sacramento 1 Office (1325 J Street) to Work Site(Per occurrence)	\$

2016AD	1001 – 1500 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
2017	Daily Crew Subsistence for Projects involving down hole Video Camera, Drain Cleaning (Rehabilitation) or Relief Well Cleaning (Rehabilitation) - This will ONLY apply to sites in Excess of 50 miles from Contractor's Main Office to Work Site (Per Day)	\$
2018	Video Tape Display/Recording for Down hole Video Camera with audio track to view sidewalls of boreholes, drains, or relief wells (Per Drain)	
2018AA	0 – 50 Depth of Drain (Per Drain)	\$
2018AB	51 – 100 Depth of Drain (Per Drain)	\$
2018AC	101 – 200 Depth of Drain (Per Drain)	\$
2019	Relief Well Rehabilitation, Cleaning less than 50 feet deep (Per occurrence)	\$
2020	Relief Well Rehabilitation, Cleaning Greater than 50 feet deep (Per occurrence)	\$
2021	Permits for encroachment to access property sites, Public Property (roads, etc.) (Cost to be Negotiated on each Task Order IAW Paragraph 4.7 of the SOW)	TBD TBD
2022	Cold Patch Asphalt (Per Bag)	\$
2023	Firefighting Unit HOURS - (Per Hour)	\$
2024		

2025	Permability Test Hours (Per Hour)	\$
2026	Water Quality Test of Wells (Per Hour)	\$
2027	Piezometers Installation (Per Linear Foot)	\$
2028	Percolation Tests (Per Test)	\$
2029	Instrumentation Rehabilitation on piezometers, inclinometers and other instrumentations (Per Hour)	\$
2030	Inclinometers Installation (Per Linear Foot)	\$
2031	Grouting for piezometers, monitoring wells, or inclinometers (Per Linear Foot)	\$
2032	Pump Test of wells, any type (Per Hour)	\$
2033	Water (Hydraulic) Pressure (Packer) Tests – To be used for Rock Coring (Per HOUR)	\$
2034	Cone Penetrometer Test (CPT) Rig Mobilization/Demobilization	
2034AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
2034AB	51 – 200 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
2034AC	201 – 1000 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
2034AD	1001 – 1500 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$

2035	Daily Cone Penetrometer Rig Crew Subsistence - This will ONLY apply to sites in excess of 50 miles from Sacramento District Office (1325 J Street) to Work Site (Per Day)	\$
2036	Grouted Cone Penetrometer Test (CPT) (Per Linear Foot)	\$
2037	Cone Penetrometer Test (CPT) Standby Time HOURS (Per Hour)	\$
2038	Pore Pressure Dissipation Test HOURS for CPT (Per Hour)	\$
2039	Backhoe/Trenching Excavation Mobilization and Demobilization ONLY	
2039AA	0 – 50 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
2039AB	51 – 200 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
2039AC	201 – 1000 Miles from Sacramento District Office (1325 J Street) to Work Site(Per occurrence)	\$
2039AD Office	1001 – 1500 Miles from Sacramento (1325 J Street) to Work Site(Per occurrence)	\$ District
2040	Daily Backhoe/Trenching Excavation Crew Subsistence - This will ONLY apply to sites in Excess of 50 miles from Sacramento District Office (1325 J Street) to Work Site (Per Day)	\$
2041	Backhoe/Trenching Excavation HOURS (Per Hour)	\$
2042	Backhoe/Trenching Excavation Standby Time HOURS (Per Hour)	\$
2043	Geologist/Geotechnical Engineer HOURS (Per Hour)	\$

2044	Additional driller's helper for Drill Rig (Per Hour)	\$
2045	Additional helper for Backhoe Operator (Per Hour)	\$
2046	Additional helper for Boreholes, Drains, or Relief Well Rehabilitation Operator (Per Hour)	\$

2nd OPTION YEAR TOTAL ESTIMATED CAPACITY PRICE \$1,333,333.33

NOT TO EXCEED AMOUNT BASE & TWO OPTION YEARS \$4,000,000.00

*NOTE: Payment will be made only for those hours that the drill rig is actually used during drilling. Drilling hours will not be paid for drilling rig use during the grouting phase and grouting shall be bid accordingly.

INSTRUCTIONS TO BIDDERS:

Please note that the bidder must complete the Pricing Schedule in Section B with just the unit prices. Also, the bidder must complete the Pricing Schedule located in Section J that will be used for the purposes of award evaluation. It is imperative that bidders complete the Pricing Schedules in Section B and Section J of this solicitation as failure to do so will result in the bid package not being considered.

All extensions of the unit prices shown will be subject to verification by the Government. In case of variation between the unit price and extension, the unit price will be considered to be the price.

The bidder shall distribute his indirect costs (overhead, profit, bond, etc.) over all the items in the Pricing Schedule. The Government will review all submitted Pricing Schedules for any unbalancing of the items. Any submitted Pricing Schedule determined to be unbalanced may be considered non-responsive and cause the bidder to be ineligible for award.

EFARS 52.214-5000 APPARENT CLERICAL MISTATES – ARITHMETIC DISCREPANCIES (MAY 1995) --EFARS

- (a) For the purpose of initial evaluation of bids/offers, the following will be utilized in resolving arithmetic discrepancies found on the face of the pricing schedule as submitted by bidders.
 - (1) Obviously misplaced decimal points will be corrected;
 - (2) Discrepancy between unit price and extended price, the unit price will govern;
 - (3) Apparent errors in extension of unit prices will be corrected;
 - (4) Apparent errors in addition of lump sum and extended prices will be corrected.
- (b) For the purpose of bid evaluation, the Government will proceed on the assumption that the bidder intends his/her bid to be evaluated on basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid/offer will be so reflected on the abstract of bids.
- (c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.
- 4. Award will be made up to <u>two lowest responsible</u>, <u>responsive bidders including base year and two option year pricing on the Basis of Award described in Section M</u> Bidders must submit prices on all items, including option years.

5. See Section L for full instructions for submittal of bids.

SECTION C - DESCRIPTIONS AND SPECIFICATIONS

Attached to Section C is a revised Statement of Work:

STATEMENT OF WORK SOIL SAMPLING & TESTING FOR WORK TO BE PERFORMED IN THE CIVIL & MILITARY BOUNDARIES SACRAMENTO DISTRICT (Revised 12/05/2002)

1. SCOPE. Services Required: Provide drilling, cone penetrometers testing services, backhoe, and trackhoe excavations. The principle features of the work shall include, but are not limited to: soil drilling and sampling using hollow stem flight augers, solid stem flight augers, mud-rotary, air-rotary, and percussion drilling methods (such as ODEX, Down-hole Casing Advance Systems, or other percussion drilling systems).

In addition, rock core drilling and sampling (up to 6inch-diameter) using wire-line or conventional, diamond-impregnated drill bits; soil sampling using standard penetrometers and other split barrel samplers up to 3inch-diameter (i.d.); undisturbed soil sampling using Shelby push tubes and Pitcher barrels with Pitcher tubes; test-pit excavations utilizing backhoes and trackhoes; Cone Penetrometer testing (CPT's) and associated tests using the Cone Penetrometer; piezometer and inclinometer installations; hydraulic pressure testing (water pressure testing) associated with rock core drilling; observation well installation and development (includes pump tests and permeability tests); percolation tests; preparation of drill logs and trench or test-pit logs; as -built diagrams for observation well(s), piezometer(s), and inclinometer(s) installations, as well as percolation tests, and all other pertinent records.

On rare occasions, as a part of this contract drilling over water using a barge may be required. This contract does not include explorations in hazardous, toxic, or radiologic (HTRW) site conditions.

The Contractor on occasion, will be required to furnish the services of a registered and licensed Geologist or Geotechnical Engineer. This individual will be professionally licensed in the state in which the work is being performed. The Contractor shall provide all labor, material, equipment, and supervision to perform the work set forth in delivery/task orders provided by the Government.

A U.S. Army Corps of Engineers' Geologist or Geotechnical Engineer will oversee all work, but on rare occasions, the Contractor will have to provide the services of a Geologist or Geotechnical Engineer as described above. If the Contractor is required to supply a Geologist or Geotechnical Engineer, then the Corps of Engineers will supply all soil logging forms and materials as well as specific directions on how to achieve precise and accurate soil or rock core logs.

2. <u>APPLICABLE PUBLICATIONS</u>. The following standards are a part of this specification to the extent to which they are referenced in individual delivery/task orders. Other standards may be referenced as necessary in individual delivery/task orders.

a. American Society for Testing and Materials (ASTM) Standard.

D 1452-80	Standard Practice for Soil Investigation and Sampling by Auger Borings
D 1586-84	Standard Method for Penetration Test and Split – Barrel Sampling of Soils
D 1587-94	Standard Method of Thin-Walled Tube Sampling of Soils
D 2113-83	Standard Practice for Diamond Core Drilling for site Investigation
D 2488-93	Standard Recommended Practice for Description of Soils (Visual-Manual Procedure)

D 4220-95	Standard Practices for Preserving and Transporting Soil Samples			
D 5079-90	Standard Practices for Preserving and Transporting Rock Core Samples			
D 5778-95	Standard Test Method for Performing Electronic Friction Cone and Piezocone Penetration Testing of Soils			

b. <u>U. S. Army Corps of Engineers.</u>

EM 385-1-1 Safety Manual, September, 1996

EM 1110-1-1804 Geotechnical Investigations, 29 February 1984

EM 1110-1-1906 Soil Sampling, 30 September 1996

3. **PRIMARY DUTIES**.

3.1. SOIL DRILLING AND SAMPLING.

3.1.1. **EQUIPMENT AND SUPPLIES.**

- a. <u>Mobilization and Demobilization</u>. Mobilization shall consist of the delivery at the site of all plant, equipment, materials, and supplies to be furnished by the contractor, and the complete assembly of all such plant and equipment, in satisfactory working order. Demobilization shall consist of the removal from the site of all plant and equipment after completion of the work and clean up of the site to as near the condition it was in prior to mobilization.
- b. General. The Contractor shall have equipment capable of soil drilling and sampling to a depth of 150 feet with a 6-inch to 8-inch-O.D. (outside diameter) hollow stem augers and/or mud rotary methods, and 250 feet with 6-inch nominal diameter or greater ODEX, down hole casing advance, or other percussion drilling systems. For any delivery/task order, the Contractor shall have on hand equipment and material to allow him to drill 30 feet greater than the maximum depth required by the delivery/task order, or 30 percent in excess of the maximum depth when the depth is 100 feet or greater. Augers shall be nominal 6-inch or 8-inch hollow stem flight auger with a minimum I.D. (inside diameter) of 3-1/4 inches. Larger size diameter hollow stem augers may be required for monitoring well, piezometer, or inclinometer installation work.
- c. <u>Provide Additional Helper</u>. The Contractor will provide one additional driller's helper when the Government requests such a person to be on site. The additional driller's helper will be required in most cases when drilling with 6-inch-diameter ODEX, down-hole casing advance, or other percussion drilling systems. The individual task order will specify any requirement for an additional drillers helper.
- d. <u>Drill Bits</u>. The Contractor shall have side or upwards discharge bits (when mud-rotary drilling is utilized) for use in zones of testing and sampling. The Contractor shall also have tri-cone roller-rock bits available for possible use if cobbles or boulders are encountered.
- e. <u>Supplies</u>. The Contractor shall provide all supplies necessary to drill to the depths specified by individual delivery/task orders. For any delivery/task order involving mud-rotary drilling, the Contractor shall have available, or have ready access to, drilling fluids, such as bentonite; natural organic polymers, and a drill mud weighted with barite in case artesian conditions, or flowing or heaving sands are encountered while drilling.
- f. Testing and Sampling Equipment. The split-barrel samplers used for standard penetration tests shall be 2.0-inch O.D., 1.375-inch I.D., 24-inches split section length and shall conform to ASTM D 1586-84. Automatic trip type hammers are required. The hammer shall deliver the equivalent energy of a 140 lb. weight experiencing a 30-inch free fall. Drill rods used for standard penetration tests shall be AWJ size or larger. Nominal 3-inch diameter split-spoon samplers (California Modified Sampler) should also be available for additional sampling. Undisturbed sampling equipment shall consist of 3-inch, 5-inch and 6-inch nominal diameter, thin-walled

galvanized steel Shelby tubes. Tubes shall be new and rust-free with smooth interiors and at least 2.5 feet long. Tubes shall be in accordance with ASTM D 1587-94. Piston type samplers may be required in soft or sensitive materials. The undisturbed samples shall be packed in shipping boxes supplied by the Contractor and secured. The shipping boxes will be constructed to specifications provided to the Contractor by the Government prior to beginning work. Undisturbed sampling using Pitcher barrels and tubes will have the same requirements as those stated for Shelby Tube undisturbed sampling except Pitcher tubes are 3-inch and 6-inch-diameter and 3 feet long.

g. <u>Miscellaneous</u>. The Contractor shall have a portable mud tank of at least 175-gallon capacity. Mud pits shall not be excavated into the ground unless approved by the Government prior to use.

3.1.2. **DRILLING PROCEDURES**.

- a. General. Every effort shall be made to assure a clean hole for standard penetration tests and undisturbed sampling. Casing, if used, shall not be driven deeper than 1-foot above the depth of the next standard penetration test. If using drilling fluid, the fluid shall be circulated long enough to assure a clean hole. Between penetration tests, bit pressure and rate of penetration shall be noted and recorded on the log. If refusal is encountered during drilling or sampling, an attempt shall be made to identify the material-causing refusal as to its type and occurrence (bedrock, limestone, boulder, granite, etc.). This information shall be recorded on the drill log. At all times during rotary drilling, drill fluid shall be maintained at the top of the hole. If heaving of the hole bottom occurs and the addition of water does not improve hole stability sufficiently, a weighted drill fluid shall be used, with density not to exceed 12 lbs./gallon. Other drilling procedures may be specified on a case-by-case basis.
- **b.** <u>Procedures for Rotary Drilling on Embankments</u>. Procedures for drilling through embankments will be specified in the individual delivery orders. Unless otherwise specified, the use of drilling fluids (water or air) is not permitted when drilling through embankments, including dams and levees.
- **3.1.3. GROUTING.** All borings not utilized for instrumentation installation shall be grouted from the bottom of hole to the top using a tremie or grout pipe unless otherwise directed by the delivery/task order. Holes that do no exceed 20 feet in depth and do not encounter water may be grouted by free-falling the grout. Drill cuttings shall be neatly dispersed around each boring location unless directed otherwise by the delivery/task order.

Upon completion of drilling, each hole shall be grouted to the ground surface. The Contractor will be paid only for the amount of grout introduced into the drillholes based on a linear foot measurement. Costs are to include all materials and labor needed to complete the grouting process, plus disposal of all drill cuttings and cleanup. It is emphasized that payment for drilling hours will not include drill rig usage during the grouting phase. Holes will normally be grouted immediately upon completion of drilling, but should it be necessary to temporarily leave the hole open, it will be required that the hole be covered with a minimum of 1/2 – inch thick plywood sheet or steel hole cover and traffic cones. After grouting, the hole will normally be allowed to settle overnight, topped with grout the following day, and then filled with soil cuttings tamped, and covered with asphalt patch if required.

BENTONITE-CEMENT GROUT: Per EM 1110-1-1906, the grout mixture should be composed of approximately 4 to 7 percent bentonite and 93 to 96 percent portland cement. Sand may be added to the grout as filler, if the proper mixing and pumping equipment are available. Water used for sealing mixtures shall be clean and of potable quality.

GROUT MIXING: Grout mixing shall be done thoroughly by mixing with a paddle-type mechanical mixer, high shear mixer, or recirculating through a pump to insure that the mixture is uniform and there are no lumps.

Grouting should be accomplished by using a tremie or grout pipe. Grouting material shall be applied in one continuous operation, from the bottom of the interval to be sealed, to the top.

GROUT INSPECTIONS: Some counties require "Grouting Permits" and inspections during the grout phase. The Contractor will be responsible for obtaining all permits and for coordinating inspection times with the appropriate County Grout Inspector.

3.1.4. PRODEDURES FOR STANDARD PENETRATION TESTS AND DISTURBED SAMPLES.

- a. General. Standard penetration tests shall be performed in accordance with ASTM D 1586-84 at the depth intervals prescribed in each individual delivery/task order. No standard penetration test shall bottom within 0.5 feet of a potential undisturbed sample zone. If no sample is retrieved at the specified interval, another sample will be taken immediately below. If refusal is encountered during drilling or sampling, an attempt shall be made to identify the material as to its type and occurrence (bedrock, boulder, etc.). A disturbed sample shall be taken from each split-barrel sample and double bagged in plastic zip-lock type bags and properly labeled. Labels shall be clearly legible and be printed in indelible ink on the bag label, the sack, and the shipment boxes. Labels shall include, but are not limited to the installation designation (i.e. base or project), project name, hole number, sample depth, date collected, type of sample, and sampler's initials. If a change of material is encountered in any split-barrel sampler, it will be noted on the drill logs and bagged separately.
- **b.** Three-Inch Split-Barrel Sampling. Three-inch split barrel samples, where ordered, shall be driven up to 24 inches, in a fashion identical to that used for standard penetration tests. A 300-pound hammer may be used if approved by the Government prior to use. Blow counts shall be recorded for the entire drive with the type of hammer and the drive intervals noted on the drill log. Samples shall be retained from each split-barrel as directed by each individual delivery/task order.

3.1.5. UNDISTRUBED SOIL SAMPLING.

- **a.** <u>Undisturbed Samples.</u> Undisturbed samples, when ordered, shall be taken with a Shelby tube pushed a distance of 2.0 feet utilizing the drill rig hydraulic system. The drilling firm shall have all attachments in order to push the tube in a vertical position. Standard penetration tests shall not be performed at the undisturbed sampling depths. Thin-walled tube undisturbed sampling shall be performed in accordance with ASTM D 1587-83, except that the sampling tubes shall be pushed rather than driven. All undisturbed samples will be sealed in the tube with microcrystalline wax (bee's wax), end capped, and duct taped. Samples retained in this fashion shall have at least 1.0 foot of recovered material and no obvious damage to the tube (e.g. crimped ends, deflections, etc.) in order to be considered undisturbed. With the tubes sealed with wax, capped, and taped; the outside of the tube shall be wiped clean and properly labeled. This label shall be clearly legible and be printed in indelible ink on the outside of the tube. The label shall include, but is not limited to, the installation designation (i.e. base or project), project name, hole number, sample depth, date collected, type of sample, and sampler's initials. End caps shall be placed on both ends of the tube and wrapped with duct tape. Samples collected in this manner shall be shipped to the designated laboratory or storage facility in an appropriate shipping crate. Shipment of undisturbed samples shall be done in such a fashion as to minimize opportunities for disturbance and, in cold weather conditions, the prevention of sample freezing.
- **b.** <u>Supplementary Holes.</u> Holes that are abandoned before reaching the specified or required depth, and which are rejected by the Government Representative because of mechanical failure of the drilling equipment, or negligence on the part of the contractor, shall be supplemented by another hole adjacent to the first and at no additional cost to the Government. The drilling method shall be the same as the rejected hole unless otherwise approved by the Government. Upon reaching the previous depth, specified procedures for drilling, sampling, and clean out shall resume. Abandoned or rejected holes shall be grouted as specified under paragraph 3.1.3, <u>Grouting</u>.

3.2. DIAMOND CORE ROCK DRILLING.

- **a.** <u>Mobilization and Demobilization</u>. Mobilization shall consist of the delivery at the site of all plant, equipment, materials, and supplies to be furnished by the contractor, and the complete assembly of all such plant and equipment, in satisfactory working order. Demobilization shall consist of the removal from the site of all plant and equipment after completion of the work and cleanup of the site.
- **b.** The Contractor shall have equipment capable of rock core drilling to 500 feet by rotary methods and the capability to core up to and including 4-inch diameter cores. HQ (approximate 2 ½ inch-diameter) or NX (approximately –inch-diameter) core shall be taken in moderately hard and hard rock, while larger core shall be taken in clay shales and soft sandstones. Core sizes will be determined by the Government per the individual job. The Contractor shall bid two costs: for HQ and smaller core, and for the larger core diameters up to approximately 4 inch in diameter. All effort shall be made to obtain as complete a recovery as possible. The Contractor shall

exercise care in recording water losses, rod jerks, and other unusual experiences while coring which, supplementing the core record, will enhance evaluation of the core. Fractures (mechanical or natural) in the rock shall be marked in the core boxes and on the logs. Voids and core losses will be marked in the core boxes by appropriately marked wooden blocks, as well as being marked on the logs. All rock core recovered shall be photographed with 35mm color film or with a digital camera. The original and duplicate set of pictures shall be submitted as part of the completed boring logs. Rock cores shall be carefully handled and preserved in core boxes of wood approved by the Government. The Contractor shall arrange core in correct sequence and separate them by wooden blocks marked to indicate the top and bottom of each core run and the depth from which the core was obtained. No box shall contain core from more than one (1) hole unless authorized by the Government. Covers shall be fastened securely to the core boxes; lids and both ends of core boxes will be labeled with the following information: (1) Project and site name or number; (2) date of recovery; (3) test hole number; (4) depth and elevation of top and bottom of the rock cores; (5) run numbers(s); (6) length of recovery; and sampler's initials. The rock core shall be stored by the Contractor until the project is completed. The cost associated with construction of suitable core boxes shall be paid for using a separate bid item. Generally, each rock core box will hold about 11-feet of core.

3.3. <u>CONE PENETROMETER TESTING (CPT)</u>.

a. <u>Mobilization and Demobilization</u>. Mobilization shall consist of the delivery at the site of all plant, equipment, materials, and supplies to be furnished by the contractor, and the complete assembly of all such plant and equipment, in satisfactory working order. Demobilization shall consist of the removal from the site of all plant and equipment after completion of the work and cleanup of the site.

The Contractor shall perform cone penetrometer testing of soils and data analysis as specified in individual delivery/task orders and per ASTM D 5778-95. The contractor-supplied rig will be fully maintained, in good condition, complete with competent and qualified operating personnel with all the necessary accessories and supplemental equipment capable of conducting Cone Penetration Tests (CPT's) to at least 200 feet deep. Costs are to include backfilling any and all holes developed by the Contractor including CPT holes. The Contractor will provide all data printouts, plots, and geotechnical interpretations to the Government. The data printouts will include, but not be limited to, depth, tip resistance, local friction, friction ratio, pore pressure, differential pore pressure, inclination, and temperature. The Contractor will provide copies of all available data collected immediately after Cone Penetrometer tests are completed in the field. The interpretation and disks are to be provided to the Government Representative at the completion of fieldwork.

Upon completion of Cone Penetration Testing, each hole shall be grouted with a bentonite-cement grout to the ground surface per paragraph 3.1.3, **GROUTING**. Costs for grouting will be included in the cost of performing the CPT's, on a linear foot basis. Holes left open will be covered with a minimum 1/2 – inch thick plywood board and safety cones until grouted.

3.4 <u>BACKHOE AND TRACKHOE EXCAVATIONS.</u>

a. <u>Mobilization and Demobilization</u>. Mobilization shall consist of the delivery at the site of all plant, equipment, materials and supplies to be furnished by the contractor, and the complete assembly of all such plant and equipment, in satisfactory working order. Demobilization shall consist of the removal from the site of all plant and equipment after completion of the work and cleanup of the site.

The Contractor shall have access to a backhoe with a qualified operator to excavate trenches, test pits, or other shallow excavations as specified in individual delivery/task orders. The general requirement is for a medium to heavy-duty backhoe unit fully maintained, in good condition, and complete with all the necessary accessories and supplemental equipment conforming to the manufacturer's specifications for the type and size required. The backhoe unit shall be operated by an experienced operator capable of digging the trenches to \pm 20-foot depths with a minimum 24-inch bucket. The test pits will be backfilled with native material, bucket tamped in 2-foot lifts, and wheel rolled upon completion. The backhoe shall also have the capability of using a bucket with ripper teeth. The backhoe shall be equipped with all approved safety items.

When requested by the Government, the Contractor will provide an additional person to assist the backhoe operator in his assigned duties.

4. ADDITIONAL DUTIES.

4.1. PIEZOMETERS AND OBSERVATION WELLS. The Contractor shall install piezometers and observation wells per instructions furnished for each delivery/task order. For each piezometer and observation well installed, the Contractor shall furnish an installation diagram. Installation procedures and materials will be specified by the Government in individual delivery/task orders. Cost for piezometer installation will be bid on a linear foot basis. Cost for observation well installation will be bid on a linear foot basis.

Backfilling methods for piezometers and observation wells will be specified per delivery/task order.

- **4.2. PERCOLATION TESTS.** Percolation tests shall be conducted as directed in each individual delivery/task order. After the percolation test(s) are performed, the Contractor shall prepare a report on the percolation test, to include size and depth of hole(s) used; a sketch showing hole number(s) and location(s); visual classification of soil types encountered and permeability characteristics; any unusual conditions which might affect percolation in the area of concern. Percolations test will be bid on per test basis.
- **4.3. INSTRUMENTATION REHABILITATION.** The Contractor may be required to perform rehabilitation work on piezometers, inclinometers, and other instruments. All rehabilitation work shall be conducted as specified in individual delivery/task orders. Once rehabilitation is completed, the Contractor shall prepare a report identifying the instrument(s) rehabilitated, summarizing the work that was conducted, and outlining the effectiveness of the rehabilitation effort. Total costs for instrument rehabilitation will be negotiated between the Government and the Contractor based on each Task Order on the unit price per hour in the contract's Pricing Schedule.
- **4.4. INCLINOMETERS.** The Contractor may be required to install inclinometers. Inclinometer installation shall be performed as directed in each individual delivery/task order. After completing the installation of inclinometer(s), the Contractor shall prepare a report describing the location of the new instrument(s), outlining the installation procedure, and documenting any difficulties encountered during the installation process. An installation diagram shall be included in this report. Costs for inclinometer installation will be bid on a linear foot basis. Backfilling methods for inclinometers will be specified per delivery/task order.
- **4.5. PUMP TESTS.** Due to the complexity of field aquifer conditions, specific pump test methodology will be provided by the Government in individual delivery/task orders. Normally, a Government representative will be onsite for the duration of each pump test. The Contractor will be especially diligent to assure that the pumping well hole size will be large enough for an adequate gravel pack to be used with screen slot sizes as determined by aquifer conditions. Hole diameter, gravel pack gradation, and screen slots will be such as to assure constant pumping rates. The Contractor shall prepare a report after the completion of the pump test. Specific requirements for this report will be identified in individual delivery/task orders. Costs for the pump tests will be bid on a per hour basis.
- **4.6 HYDRAULIC PRESSURE TESTS FOR ROCK CORE BORINGS.** Packer Spacing and test intervals will be specified per individual delivery/task order. Packers may be inflated by water or air (nitrogen) and shall be supplied by the contractor. Costs for the hydraulic pressure tests will be bid on an hourly basis.
- **ENCROACHMENT PERMITS.** The Contractor will be required to apply for and obtain encroachment permits from the County or City that work is to be conducted in. In case of work being conducted on a State maintained thoroughfare, such as a State of California Highway, all permits will be obtained through the State Department of Transportation. An encroachment permit is required if a public thoroughfare is to be blocked off for any work authorized by the Corps of Engineers. A permit will be required if work is to be conducted on the shoulder of a county road or State Highway. The Contractor will be reimbursed for the price for permits, the price for permits will be negotiated on each Task Order as applicable, the Contractor will propose the actual amount of the permit and no more than four-(4) hours to prepare and coordinate with the County, City, or State Inspectors to approve the work site. For all encroachment permits, it is required that some form traffic control will be used.
- **4.8 PERCOLATION TESTS BASED ON THE TAFT PROCEDURE.** In the absence of groundwater or subsoil information, subsurface explorations are necessary. Percolation tests determine the acceptability of the site

and serve as the basis for design for the liquid absorption. Six or more tests are generally made in separate test holes spaced uniformly over the proposed absorption field site.

The type of test of may vary depending on location. The Contractor will dig or bore a hole with horizontal dimensions from 4 to 12-inches and with vertical sides. To save time, a percolation test hole may be drilled with an auger.

Preparation of the test hole will include carefully scratching the bottom and sides of the hole with a knife blade or other sharp instrument, in order to remove any smeared soil surfaces and to provide a natural soil interface into which water may percolate. Remove all loose material from the hole. Add 2-inches of coarse sand or fine gravel to protect the bottom of the hole from scouring and sediment.

Saturation and swelling of the soil. Saturation means that the void spaces between soil particles are full of water. This can be accomplished in a short period of time. Swelling is caused by intrusion of water into the individual soil particle. This is a slow process, especially in clay-type soil, and is the reason for a prolonged soaking period. To conduct the test, carefully fill the hole with clean water to a minimum depth of 12-inches above the fine gravel or coarse sand. In most soils it is necessary to refill the hole by supplying a surplus reservoir of water, in order to keep water in the hole for at least 4 hours, and preferably overnight.

The percolation test shall be conducted 24 hours after the initial water is first added to the hole, except in sandy soils. In sandy soils, generally after an overnight swelling period has elapsed, the test period will be one hour in duration, with the last 10 minutes of the percolation test used to calculate the percolation rate. This is the ideal method. However, in sandy soil where the first 6-inches of water seeps away in less than 30 minutes, a minimum 4-hour period will be sufficient for soaking and swelling of the soil. After this period, the percolation test may be conducted.

If water remains in the test hole after the overnight swelling period, clear water will be added to bring the water level up to 6-inches above the gravel pack that had been placed in the bottom of the hole. Then the drop of water will be measured at 30-minute intervals from a fixed reference point, refilling 6-inches over the gravel pack as necessary. These measurements will be conducted over a four-hour period, with the final 30-minute interval being used to calculate the percolation test.

The Contractor will receive instructions on type of percolation test with each delivery/task order if it is required.

The Contractor will bid on this item as a lump sum per percolation test as requested.

5. <u>MISCELLANEOUS</u>.

- **5.1. GROUND WATER INFORMATION.** The depth at which ground water is first encountered and the water level at completion of drilling shall be recorded on the drill log. When requested by the Government Representative, all borings shall be covered and left open for approximately 24 hours or as directed by the delivery/task order. The final stabilized ground water level shall be recorded on the drill log along with the amount of time between the culmination of drilling and the final ground water measurement. While holes are open, surface run-off will be diverted from the holes.
- **5.2.** CARE AND DELIVERY OF SAMPLES. The Contractor shall be solely responsible for preserving all samples in good condition as outlined herein or as directed by the delivery/task order. The Contractor shall take necessary precautions to keep samples from undue exposure to the weather and shall keep all descriptive labels and designations clean and legible until final delivery. Undisturbed samples shall not be allowed to freeze after collection under any circumstances. Samples shall be delivered in person by the Contractor personnel or shipped airfreight prepaid to an address provided by the Government within 5 days of completion of each project.

5.3. DRILL LOGS.

- **a.** General. In the event that the Government cannot supply geologist to oversee and classify the soil and/or rock being sampled, the Contractor shall provide a geologist. The geologist supplied shall be registered in either the state of California, or in the state where the work is being performed. In that case, the Government will provide drill log forms for the contractor's use and direction on how to complete them. The Contractor shall prepare a neat and accurate drill log for each boring. The Government Representative shall have a right to examine drill logs at any time prior to their delivery. Three (3) copies of each drill log (original and two (2) copies) shall be provided to the Government. The method of delivery shall be coordinated by the Government.
- **b.** <u>Subsurface Drill Logs</u>. All drill logs shall be prepared in the field, as borings are drilled, by an experienced registered geologist or geotechnical engineer.
- **5.4. PRE-PERFORMANCE MEETING.** Upon issuance of a deliver/task order, a meeting or oral discussion shall be held between the Contractor and the Government to discuss work procedures and other applicable delivery/task order criteria.

5.5. LAYOUT AND CLEAN-UP.

- **a. Layout.** Unless otherwise directed, the Government shall layout the site of work and ensures that the appropriate permits and clearances have been obtained.
- **b.** <u>Clean-up</u>. Clean up consists of the removal from the site of all debris resulting from the contractor's operation and restoration of the site, including any grass, trees, shrubs or instrumentation, to its original condition.
- **6. AUTHORITIES.** No person(s) other than the Government Contracting Officer has the authority to make any changes to this contract action that impact cost and/or schedule. Authority from the Contracting Officer to the Contractor to make changes that impact cost and/or schedule will be in the form of an official, signed modification.
- **7. PAYMENT**: Will be made in arrears at the contract unit price for service performed in accordance with the bid schedule and as described herein.
- **8. INVOICES**: An Invoice shall be submitted to USACE Finance Center, ATTN: CEFC-AO-P, 5720 Integrity Dr., Millington, TN 38054-5005. One additional copy of the invoice shall be submitted to U.S. CORPS OF ENGINEERS, Attention: CESPK-ED-G/Leila Gee, 1325 "J" Street, Sacramento CA 95814.

SECTION F - DELIVERIES OR PERFORMANCE

The following Local Clause in Section H has been changed to reflect Minimum Guarantee Amounts as follows:

SPK 17-4007 CONTRACT PERFORMANCE PERIOD-INDEFINITE DELIVERY CONTRACTS (NOVEMBER 2000)

The indefinite-delivery, indefinite-quantity contract(s) is for one basic contract period (273 calendar days from contract award) and two option periods. The performance period shall begin upon contract award. At the discretion of the Government the option periods may be exercised. Each option period has a performance period of 365 calendar days from the date the option is exercised. If all options were exercised, the total performance period for this contract would be nine months and two years. The contract may not be extended beyond nine months and two years (except under the conditions of FAR 52.217-8); however, the performance periods of the task orders (which must be issued within the contract's performance period) may extend beyond the nine months and two year period. At the end of each performance period awarded by the Government (basic contract period or exercised option period), the Government will notify the contractor in accordance with FAR 52.217-9 of its intent to exercise the next option year.

As work is identified by the Government to be done under this contract, the Government shall develop the Scope of Work, request a cost proposal from the Contractor, negotiate and award the Task Order. Each Task Order will have its own performance period. The Contractor shall complete the entire work on each Task Order within the performance period specified in the Task Order.

The Government reserves the right to exercise options to extend the term of the contract in accordance with Section I, FAR 52.217-8 and 52.217-9.

OPTION PERIODS At the discretion of the Government the option periods may be exercised and the term of this contract extended. The exercise of the option will be by written notice (i.e., a modification to the contract on SF30) issued within the period specified in the contract for the exercise of an option in accordance with FAR 52.217-9. If the Government exercises this option, the extended contract shall be considered to include this option provision.

The scope of the contract is \$4,000,000.00 and 273 Days and two-(2) years whichever occurs first. The \$4,000,000.00/273 Days and two-(2) years are the only maximums; there are no ceiling or maximums set for the individual periods of the contract (Base Period or Option Years).

If one contract is awarded the Minimum Guarantee for the Base Year is \$26,666.66 and Option Years Minimum Guarantee is \$13,222.33

If Two Contracts are awarded the Minimum Guarantee for the Base Year per contract is \$13,333.33 and Option Years Minimum Guarantee is \$6,666.66.

///////END OF CLAUSE //////////

SECTION G - CONTRACT ADMINISTRATION DATA

The following Local Clause in Section G has been changed to reflect additional invoice instructions as follows:

SPK 32-4003 INVOICES (MAY 2000)

- (a) The Government shall pay the Contractor upon submission of proper invoices for supplies delivered and accepted or services rendered and accepted for the portion of work actually performed under this contract. Invoices will be submitted to: U.S. ARMY CORPS OF ENGINEERS, Finance Center, 5720 Integrity Drive, Millington TN 38054-5005
- (b) An additional copy of every invoice shall be provided to: U.S. CORPS OF ENGINEERS, Attention: CESPK-ED-G/Leila Gee, 1325 "J" Street, Sacramento CA 95814. Upon completion of each Task Order the Contractor shall also provide a copy of the final invoice for payment against that Task Order to U.S. Corps of Engineers, Attention: CESPK-CT-B, 1325 J Street, Sacramento CA 95814.
- (c) Payments will made on actual quantities, the Contractor shall track actual quantities and provide written proof of quantities upon invocing for payment.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

The following DFARS Clause has been added to Section H by full text:

216.505-70 Orders for services under multiple award contracts.

- (a) This subsection--
 - (1) Implements Section 803 of the National Defense Authorization Act for Fiscal Year 2002 (Pub. L. 107-107);
 - (2) Applies to orders for services exceeding \$100,000 placed under multiple award contracts, instead of the procedures at FAR 16.505(b)(1) and (2) (see Subpart 208.4 for procedures applicable to orders placed against Federal Supply Schedules);
 - (3) Also applies to orders placed by non-DoD agencies on behalf of DoD; and
 - (4) Does not apply to orders for architect-engineer services, which shall be placed in accordance with the procedures in FAR Subpart 36.6.
- (b) Each order for services exceeding \$100,000 shall be placed on a competitive basis in accordance with paragraph (c) of this subsection, unless the contracting officer waives this requirement on the basis of a written determination that--
 - (1) One of the circumstances described at FAR 16.505(b)(2)(i) through (iv) applies to the order; or
 - (2) A statute expressly authorizes or requires that the purchase be made from a specified source.
- (c) An order for services exceeding \$100,000 is placed on a competitive basis only if the contracting officer--
 - (1) Provides a fair notice of the intent to make the purchase, including a description of the work the contractor shall perform and the basis upon which the contracting officer will make the selection, to all contractors offering the required services under the multiple award contract; and
 - (2) Affords all contractors responding to the notice a fair opportunity to submit an offer and have that offer fairly considered.
- (d) When using the procedures in this subsection--
 - (1) The contracting officer should keep contractor submission requirements to a minimum:
 - (2) The contracting officer may use streamlined procedures, including oral presentations;
 - (3) The competition requirements in FAR Part 6 and the policies in FAR Subpart 15.3 do not apply to the ordering process, but the contracting officer shall consider price or cost under each order as one of the factors in the selection decision; and
 - (4) The contracting officer should consider past performance on earlier orders under the contract, including quality, timeliness, and cost control.

The following FAR Clauses in Section H have been modified to reflect the correct dollar values:

52.216-19 ORDER LIMITATIONS. (OCT 1995)

- (a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than \$250.00, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.
- (b) Maximum order. The Contractor is not obligated to honor:
- (1) Any order for a single item in excess of \$4,000,000.00;
- (2) Any order for a combination of items in excess of \$4,000,000.00; or
- (3) A series of orders from the same ordering office within five-(5) days that together call for quantities exceeding the limitation in subparagraph (1) or (2) above.
- (c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.
- (d) Notwithstanding paragraphs (b) and (c) above, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within five-(5) days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of clause)

SPK 16-4002 INDEFINITE QUANTITY (JUL 1993)

- (a) This contract is an indefinite-delivery, indefinite-quantity contract. All work shall be performed through issuance of Task Orders. The Contractor shall perform no work under this contract unless a written Task Order signed by the Contracting Officer has been issued by the Government. The Contractor shall complete all work described in the Scope of Work for each Task Order within the performance period of each Task Order. A corps of Engineers, Sacramento District, Contracting Officer is the only person authorized to issue Task Orders against this contract. All Task Orders will be in writing. Task Orders may be issued by the Contracting Officer via FACSIMILE with the hard copy of the Task Order to follow. The effective date of the Task Order, if FACSIMILE is used, is the date the Government enters the Task Order into the FACSIMILE machine and received confirmation that it was transmitted.
- (b) Each Task Order will be issued on a firm, fixed-price basis based upon the unit prices (cost elements) negotiated in the basic contract (Pricing Schedule, Section B); the number of work units and/or quantity will be negotiated for each Task Order. The Government shall provide a Scope of Work for each Task Order; the Contractor shall furnish a detailed proposal to the Government based upon the Scope of Work; the Government and the Contractor shall negotiate the firm, fixed-price for the Task Order; the Contracting Office will issue the Task Order.

///////////// END OF CL	LAUSE
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SECTION J - LIST OF DOCUMENTS. EXHIBITS AND OTHER ATTACHMENTS

PRE-AWARD SURVEY

This Preaward Survey will be required from the apparent low bidder after

bid opening if the contractor has not been awarded a contract with the Sacramento or San Francisco District of the Corps of Engineers within the last year.

PREAWARD SURVEY OF PROSPECTIVE CONTRACTORS

It is the general policy of the Department of Defense that contracts shall be awarded only to contractors determined to be responsible in accordance with Part 9 of the Federal Acquisition Regulation (FAR).

No contract shall be awarded to any person or firm unless the Contracting Officer first makes an affirmative determination that the prospective contractor is responsible within the meaning of the FAR, Part 9.

Before making a determination of responsibility, the Contracting Officer shall have in his/her possession or obtain information sufficient to satisfy himself/herself that a prospective contractor currently meets the minimum FAR Part 9 standards.

In order to make the required determination and also to expedite the contract award, the following information must be submitted by the Contractor as directed:

- A. COMPLETED CONTRACTOR EXPERIENCE DATA FORM WITH SUPPLEMENTAL SCHEDULES A-C (ATTACHED).
- B. LATEST FINANCIAL STATEMENTS. IF THE FINANCIAL STATEMENT IS MORE THAN 60 DAYS OLD, SUBMIT A CERTIFICATE STATING THAT THE FIRM'S FINANCIAL CONDITION IS SUBSTANTIALLY THE SAME, OR, IF NOT THE SAME, STATE THE CHANGES THAT HAVE TAKEN PLACE.
- C. PROVIDE LETTERS FROM BANKS OR OTHER FINANCIAL INSTITUTIONS WITH WHICH THE CONTRACTOR CONDUCTS BUSINESS. THE LETTERS SHOULD CONTAIN INFORMATION ABOUT YOUR FIRM'S ACCOUNTS, LOANS, LINES OF CREDIT, ETC., PROVIDING INFORMATION LEADING TO A DETERMINATION THAT YOUR FIRM IS "RESPONSIBILE" AS DEFINED IN THE FEDERAL ACQUISITION REGULATION, PART 9, "HAS THE FINANCIAL RESOURCES TO PERFORM THE CONTRACT OR THE ABILITY TO OBTAIN THEM". THE GOVT IS INTERESTED IN FINANCIAL STABILITY, TIMELY PAYMENTS, THE LENGTH AND NATURE OF THE RELATIONSHIP BETWEEN THE FIRM AND THE FINANCIAL INSTITUTION, ETC. WHICH REVEALS THE FIRM'S FINANCIAL ABILITY TO PERFORM THE CONTRACT. THE LETTERS SHOULD ALSO PROVIDE THE NAME AND TELEPHONE NUMBER OF THE BANK REPRESENTATIVE THE GOVERNMENT MAY CONTACT.

THESE DOCUMENTS SHALL BE TREATED BY THE GOVERNMENT AS CONFIDENTIAL.

CONTRAC TOR EXPERIENCE DATA		DATE:		
Firm Name and Telephone Num	ber	Main Office Address (Street, City, and State)		
1				•
Branch Offices				Services Rendered
				Soil Drilling
				Soil Testing/Sampling
				Consulting
Organization		Date Organized		Date Incorporated:
Individual Joint	Venture			
Partnership Corpo	oration			State:
Names of Officers and Other Ke	ev Personnel			
Traines of Officers and Other Re	y i cisonnei			
I – PRESENT PAYROLL PE	RSONNEL (List Number of Each	Category Below)		
	Remainder:	Subtotal Permanent:		
	Total:	Maximum Personnel at	Any Time:	
Other Key:		Date:	,	
II—EQUIPMENT OWNED		III—FINANCIAL DATA AS OF		
Present Value (\$)		(DATE):		
		<u> </u>		
		Current Assets:		
Acquisition Cost (\$)		Current Liabilities:		
		Net Worth:		
	ILLING CONTRACT WORK I		V—LARGEST JOB EVER	
EXCLUSIVE OF JOINT VEN	TURE (LIST MOST RECENT F			D (D W)
¢.	T A D CECTE TOD DAD COT	TIDO	(If Other Than in	Past Four Years)
\$	LARGEST JOB IN PAST 6	YKS	Contract Amount:	
\$	Contract Amount:		Date:	
\$	Date:		Description:	
\$	Description:			
\$	<u> </u>			
\$	Owner:		Owner:	
Avg. Annual Income	GWHCI.		Owner.	
\$	WOLLEYDLY GDEGLAY YORG			
VI—TYPE OF WORK IN WE	HICH FIRM SPECIALIZES			
NAME AND DOCUMENT	E OF DEDCON SIGNING	CICNATIII	DE .	
NAME AND POSITION/TITLE OF PERSON SIGNING SIGNATURE				
NOTE: Use additional sheets	for explanations or detailed descr	rintion of item(s) reports	ed ahove	
11012. Osc additional sheets	tor captanations or uctaneu descr	ipaon of iwin(s) report	cu above.	

SCHEDULE A

CONTRACTOR EXPERIENCE DATA

EXISTING COMMITMENTS: (List below the projects your firm has under way on this date, including those on which you are presently low bidder but have not received an award.)

CONTRACT NUMBER

PERCENT PERCENT

AND AMOUNT DESCRIPTION OF WORK FOR WHOM PERFORMED*

COMPLETE SUBLET

^{*} PROVIDE NAME OF ORGANIZATION, POINT OF CONTACT AND TELEPHONE NUMBER FOR CONTACT.

SCHEDULE B

CONTRACTOR EXPERIENCE DATA

EXPERIENCE DATA: (List below the principal projects your firm has completed within the past six (6) years.)

PERCENT SUBLET

CONTRACT NO. AMOUNT DESCRIPTION/LOCATION CONTACT PERSON/PHONE NO

SCHEDULE C

CONTRACTOR EXPERIENCE DATA

TECHNICAL EQUIPMENT: (List total equipment and facilities owned for performing the work and present status as to whether or not it is committed to existing contracts.)

YEARS OF

PRESENT

QUANTITY DESCRIPTION CONDITION SERVICE

STATUS

SECTION M - EVALUATION FACTORS FOR AWARD

The following have been added into Section M by full text:

BASIS OF AWARD

The Government contemplates award of up to two contracts to the lowest price, responsive, responsible bidder(s) using the Pricing Schedule in Section J, lowest price will be determined using the "Total Estimated" price for the Base Year and Two Option Years.

(End of Summary of Changes)